



## Wireless E-911 Services Board

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### Phase II



- Longitude and latitude location of the caller.
- Margin of error for accuracy depends on technology solution.
- Implementation dates depends on technology solution.

## Accuracy



- Handset Based Solution
  - 50 meters / 67% of the calls
  - 150 meters / 95% of the calls
- Network Based Solution
  - 100 meters / 67% of the calls
  - 300 meters / 95% of the calls

## Timeline



- Announce Technology by November 9
- Handset based
  - Begin selling by October 2001 (regardless of request).
  - 25% of new by December 31, 2001.
  - 50% by June 30, 2002.
  - 100% by December 31, 2002.
  - Full penetration (95%) by December 31, 2005.
- Network based
  - 50% of area in 6 months of request.
  - 100% within 18 months.

## Preparation



- Identified “new” requirements for PSAPs for Phase II.
  - Mapping Data
  - Display System
- Computerized mapping not necessarily required.
- Held two focus groups to solicit input from the user community.

## Mapping Data



- Aerial Photography
  - Digital orthographic
  - VGIN program
- Street centerline and addressing
  - Drawn on top of the photography
  - VDOT project



## Display System



- CPE-based
- CAD-based
- Separate system
- Service provider (data and display)

## PSAP Funding



### Mapping

|   | Prince William   | Henrico   | Staff  |
|---|--|---|--|
| • Aerial Photography (Initial effort)   | Wireless percentage of cost or higher amount for start up such as composite index or fixed amount. | 100% of cost - Should be conducted in a statewide program.      | Composite index or Statewide program (whichever is more economical). |
| • Aerial Photography (Repeated)         | No funding.  | Wireless percentage of cost.                                    | No funding unless statewide program.                                 |
| • Street Centerline (Initial effort)    | Wireless percentage of cost or higher amount for start up such as composite index or fixed amount. | 100% of cost - Should be conducted in a statewide program.      | Composite index or Statewide program (whichever is more economical). |
| • Street Centerline (On-going)          | No funding.  | Wireless percentage of cost.                                    | No funding.  |
| • Building and Parcels (Initial effort) | No funding.  | 100% - Should be conducted in a statewide program.              | No funding.  |
| • Building and Parcels (On-going)       | No funding.  | Wireless percentage of cost.                                    | No funding.  |
| • PSAP Personnel for Maintenance        | Wireless percentage of cost.   | Wireless percentage of cost or 100% for first year of start-up. | Wireless percentage of cost.   |
| • Addressing Equipment                  | Not discussed.   | Not discussed.  | Wireless percentage of cost.   |

# PSAP Funding



## Display System

|                                | Prince William  | Henrico   | Staff   |
|--------------------------------|---|---|---|
| • CPE-based (Initial purchase) | 100% of total cost to implement (conflation, hardware, installation). | 100% of total cost to implement (conflation, hardware, installation). | 100% of total cost to implement (conflation, hardware, installation). |
| • CPE-based (Replacement)      | Wireless percentage of cost.  | Wireless percentage of cost.  | Wireless percentage of cost.  |
| • CPE-based (Maintenance)      | Wireless percentage of cost.  | Wireless percentage of cost.  | Wireless percentage of cost.  |

# PSAP Funding



## Display System (Continued)

|  |  |  |  |
|--|--|--|--|
| • CAD-based (Interface)                        | 100% of cost of interface.   | 100% of cost of interface.   | 100% of cost of interface.   |
| • CAD-based (Addition of Mapping)              | 100% of total cost to implement (conflation, hardware, installation).                | 100% of total cost to implement (conflation, hardware, installation).  | 100% of total cost to implement (conflation, hardware, installation).  |
| • CAD-based (Entirely new CAD system)          | 100% of total cost to implement (conflation, hardware, installation).                | 100% of the cost of the interface and mapping components only (if it cannot be split out of the cost of the system, then no funding provided). | 100% of the cost of the interface and mapping components plus the wireless percentage of the rest of the cost of the system. |
| • CAD-based (Replacement of entire CAD system) | Wireless percentage of total cost to implement (conflation, hardware, installation). | Wireless percentage of the cost of the interface and mapping components only.  | Wireless percentage of the cost of the interface and mapping components only.  |
| • CAD-based (Maintenance)                      | Wireless percentage of cost.   | Wireless percentage of cost.   | No funding.  |

## Phase II PSAP Funding

### Display System (Continued)

|                                      |   |   |   |
|--------------------------------------|---|---|---|
| • Separate system (Initial purchase) | 100% of total cost to implement (conflation, hardware, installation). | 100% of total cost to implement (conflation, hardware, installation). | 100% of total cost to implement (conflation, hardware, installation). |
| • Separate system (Replacement)      | Wireless percentage of cost.  | Wireless percentage of cost.  | Wireless percentage of cost.  |
| • Separate system (Maintenance)      | Wireless percentage of cost.  | Wireless percentage of cost.  | Wireless percentage of cost.  |
| • Service Provider based             | 100% of total cost.   | 100% of total cost.   | 100% of total cost if no other use than wireless E-911.               |

## PSAP Funding

### Other Comments

| Prince William   | Henrico  | Staff   |
|--|--|---|
| <ul style="list-style-type: none"> <li>Requested statewide study of Phase II implementation options to include a rider for localities to acquire consulting services for Phase II project management. All costs for study and consulting service to be paid by the Wireless Fund.</li> </ul> | <ul style="list-style-type: none"> <li>Requested a statewide standard for small, medium and large PSAPs and fund different items at different levels for each type of agency and upgrade systems if a PSAP grows from one size to another.</li> <li>Requested consideration of needs based funding based on the needs of the PSAP and the localities ability to fund (possible use of composite index).</li> </ul> | <ul style="list-style-type: none"> <li>Recommend statewide study of Phase II implementation options to include a rider for localities to acquire consulting services for Phase II project management. All costs for study and consulting service to be paid by the Wireless Fund.</li> <li>Do NOT recommend a statewide standard for small, medium and large PSAPs and fund different items at different levels for each type of agency.</li> <li>Do NOT recommend consideration of needs based funding based on the needs of the PSAP and the localities ability to fund (possible use of composite index).</li> </ul> |

## Study



- Inventory and evaluate current equipment and data as it relates to wireless E-911.
- Prepare options for each localities to implement wireless E-911.
- Provide contract vehicle for localities to use consultant for project management.

## Consulting Rider



- Many localities lack the time and expertise for dealing with wireless 9-1-1.
- Will likely speed implementation.
- Will lower cost (of study and service).
- Should not limit to Phase II.
- Should require localities to develop a detailed scope of work.